# Codian IP Gateway MSE 8350

Getting started



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#### **General information**

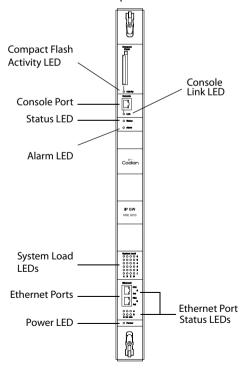
#### About the MSE 8350 IP GW blade

The MSE 8350 IP GW blade fits into an MSE 8000 chassis. The IP GW blade is a voice and video gateway that allows calls to be made between pairs of IP endpoints that cannot normally connect directly to each other. A second Ethernet port allows for connections between two completely independent networks of endpoints. A built-in auto attendant and support for manual operators allow easy connection of calls where the endpoint cannot directly address the destination endpoint. The IP GW blade translates call signalling (for example, between SIP and H.323) and can connect between almost any two endpoints. The IP GW blade can transcode all media to ensure the call takes place.

#### Port and LED location

Figure 1 shows the position of ports and LEDs on the IP GW blade.

Figure 1: IP GW blade front panel



# **LED** behavior

Table 1 describes the behavior of the LEDs.

Table 1: IP GW blade LED behavior

LED	Color	Indicates
Compact Flash Activity	Flashing green	One of:  • the IP GW blade is booting  • a configuration change has been made  • the configuration is being transferred by FTP
Console Link	Green	A PC is connected to the console port
Status	Green	The IP GW blade is operating normally
Alarm	Red	The IP GW blade is booting or has developed a fault, for example:  • temperature is outside normal limits  • battery failure of the internal clock  Refer to the web interface for more information about the problem (go to   Status > Health)
System Load	Green	The IP GW blade is processing data. The LEDs represent the media processing load of the IP GW blade. The column numbered 1 represents audio load. The other columns represent video DSP load. Media processing load is also displayed in the web interface: go to <b>Status &gt; General</b> to see the percentage load

Table 1: IP GW blade LED behavior (continued)

LED		Color	Indicates	
Ethernet Port Status, for each Ethernet port:				
	FDX	Green	The link has been negotiated as a full-duplex link	
	Act	Green	Packets are being transmitted on this port	
	Link	Green	The speed of the link from this port, which is either 10, 100, or 1000 Mbps	
Power		Blue	The IP GW blade is receiving power from the MSE 8000 chassis	

# Installing the IP GW blade



Before installing the IP GW blade into the MSE 8000, read the Safety Information guide that accompanied the MSE 8000 chassis.



Although blades are hot-swappable parts, you must only remove one blade at any time. Remove the power from the MSE 8000, if you need to remove more than one blade at a time.



Before hot-swapping a blade, shut down the blade using the web interface. Do not shut down a blade during a software upgrade or if the blade is processing (for example if a call is taking place).

For information about powering the MSE 8000, refer to the Getting Started Guide that accompanied the chassis.

#### Step one: Install the IP GW blade into the MSE 8000 chassis



You must install either a blade or a blanking blade in each of the ten positions in the chassis.



The Supervisor blade must be installed into slot 1 of the MSE 8000 chassis.

- 1 Remove the blade or blanking blade from the slot into which you are going to install the IP GW blade:
  - i Using a No.1 Phillips screwdriver, loosen the screws in the retaining latches with an anti-clockwise quarter turn.
  - ii Open both retaining latches on the front of the blade or blanking blade. When open, a retaining latch is at a 90° angle perpendicular to the front of the blade.
  - iii Slide out the blade or blanking blade.
- 2 Open both retaining latches on the front of the IP GW blade. When open, a retaining latch is at a 90° angle perpendicular to the front of the blade.
- 3 Slide the IP GW blade into the blade slot (as shown in Figure 2) until it stops.
- 4 Simultaneously close both retaining latches on the blade (thereby engaging the connectors at the rear of the blade) to secure in the chassis as shown in Figure 3.

5 Using a No.1 Phillips screwdriver, tighten the screws in the retaining latches with a clockwise quarter turn.

Figure 2: Inserting a blade into the chassis

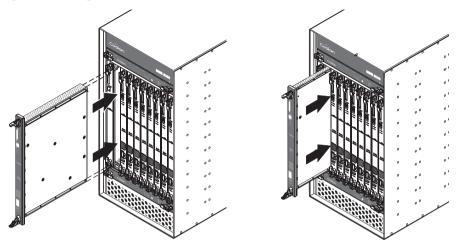
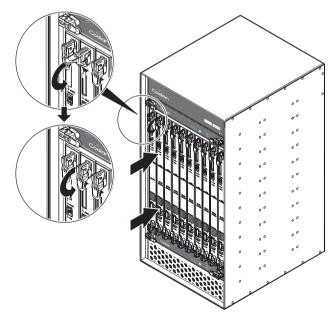


Figure 3: Closing the retaining latches on the front of a blade



#### Step two: Connect to Ethernet Ports A and B

Connect an Ethernet cable from Ethernet Port A to an Ethernet switch (rather than a hub, to minimize interference from other devices on the network). The Ethernet port is a 10/100/1000 Mbps auto-sensing connection.

Connect Port A to your local network and connect Port B to a second subnet or the internet depending on your application of the IP GW blade.



Do not connect Ethernet Port A and Ethernet Port B to the same subnet.

# **Initial configuration**

### Step one: Configure Ethernet Ports A and B

The default setting for the IP GW blade Ethernet ports is auto-sensing mode. If the switch ports to which you connect the IP GW blade are not also set to auto-sensing mode, then you need to configure the IP GW blade Ethernet ports to use the same speed and duplex mode.



Both ends of the Ethernet connection must be configured in the same way. For example, either configure both ends of the link to be autosensing or configure both ends to operate at the same speed and duplex.



To establish a 1000Mbps connection, both ends of the link must be configured as auto-sensing.

You can use the Supervisor's web interface to configure the IP addresses of all blades installed in the MSE 8000. Note that all blades are supplied with DHCP enabled on Port A; you can either keep this setting or assign static IP address to Port A. Port B does not support DHCP; you must manually configure its IP address.

To configure the IP addresses and port settings of the IP GW blade, log in to the Supervisor and go to **Hardware > Blades**. To access the web interface of the IP GW blade, go to **Hardware > Blades** and click the IP address of that blade.

For more information about configuring the ports, refer to the online help accessible from the Supervisor's web interface.

#### Step two: Configure the default gateway and routes (optional)

If the networks to which you connect contain more than one subnet, you might need to change the default gateway preference on the IP GW blade (default setting is Port A). You might also need to add routes to the configuration of the IP GW blade to indicate which interface will be used for certain IP addresses.

To configure the default gateway and route information:

- 1 Log in to the Supervisor and go to **Hardware > Blades**.
- 2 Click the name of the IP GW blade and select the Routes tab.

For more information about route configuration, refer to the online help topic: "Individual blade routes configuration".

# Configuring the IP GW blade

#### Step one: Log in to the IP GW blade

All administration of the IP GW blade is performed through the web interface.

To log in to the web interface of the IP GW blade:

- 1 Log in to the Supervisor's web interface.
- 2 Go to **Hardware > Blades** and click the IP address of the IP GW blade.
- 3 Click Click here to log in, and then click Change log in and enter the user name admin with no password.



Codian recommends that you change the admin account to use a password as soon as possible. To do that, go to **Users**, click the **admin** link, and provide the required user information.

# Step two: Configure an H.323 gatekeeper or SIP registrar (optional)

If you have H.323 endpoints, using an H.323 gatekeeper can make it easier for callers to make their call. You can configure the IP GW blade to use an external gatekeeper or its own built-in gatekeeper.

If you have SIP endpoints, using a SIP registrar can make it easier for callers to make their call.

- ▶ To configure the use of an H.323 gatekeeper, go to **Settings > H.323**
- To configure the use of a SIP registrar, go to Settings > SIP

For more information refer to the online help topics: "Configuring H.323 settings" and "Configuring SIP settings".

#### Step three: Configure the auto attendant menus (optional)

Depending on the proposed configuration of your dial plan, and the settings for failed calls, callers can be connected to an auto attendant menu. The IP GW blade provides a highly flexible menu-creation feature. This enables you to create a menu (or a multi-layered menu structure) to provide end users with the options they require when they connect to the IP GW blade. Menus can provide end users with access to videos, operators, address books, dial-it-yourself functions, and audio files.

▶ To configure auto attendant menus, go to **Menus > Menu builder**For more information, refer to the online help topics: "Creating auto attendant menus", "Configuring failed call settings", and "Understanding the dial plan".

### Step four: Configure an operator (optional)

An operator is a person who can put calls through on the IP GW blade. You can use the dial plan to automatically connect calls to an operator, you can have the operator as an option on an auto attendant menu, and connection to an operator is an option for failed calls. An operator connects the calls one by one as calls reach the top of the operator's call queue which is displayed on the operator's web page and is automatically refreshed.

An operator can put calls through to configured endpoints and call groups that have been given names in the system, or to any other endpoint by manually entering the IP address or E.164 number of the endpoint.

You can configure one or more operators.

▶ To configure an operator, go to **Settings** > **Operator** 

For more information, refer to the online help topics: "Understanding operator features" and "Configuring operator settings".

#### Step five: Add endpoints and call groups (optional)

You can pre-configure a list of endpoints on the IP GW blade. For these endpoints, an operator or caller can simply choose the endpoint's name from an onscreen address book, rather than having to type in the endpoint's address when a caller wants to be connected to that endpoint.

You can group configured endpoints into call groups. When a call group receives a call, all endpoints in the call group will ring and the first to be answered will take the call. Call groups can be useful in organizations that have, for example, sales or support teams where anyone from the team can take a call. An operator or caller can choose a call group to which to connect an incoming call from the address book.

When you configure endpoints and call groups, you can select whether or not that endpoint or call group will be shown in the address book. Callers can connect to that endpoint, without the caller having to know its address.

▶ To configure endpoints and call groups, go to **Endpoints** 

For more information, refer to the online help topics: "Configuring endpoints" and "Configuring call groups".

#### Step six: Configure the dial plan

The default behavior of the IP GW blade is to reject all calls. You must configure a dial plan to allow permitted calls to be placed. The dial plan is in two parts: a dial plan for calls arriving on Port A and a dial plan for calls arriving on Port B.

There are a number of different ways in which you can use the dial plan. For example, you can configure a particular prefix that will forward calls to the operator and another to connect callers to a menu on the auto attendant.

▶ To configure the dial plan, go to **Dial plan** 

Dial plan configuration (with supporting examples) is explained in greater detail in the online help; refer to the topics: "Understanding the dial plan", "Adding and updating dial plan rules", "Example dial plan rules", "Dial plan syntax", and "Displaying and testing the dial plan".

# **Checking for updates**

It is a good idea to regularly check for updates to the main IP GW blade software image. This section describes how to upgrade the IP GW blade using the web interface. Note that you can also upgrade the IP GW blade using FTP; this can be more reliable if you are upgrading the device remotely. Upgrading your device via FTP is described in the release notes that are available alongside the software images in the support section of the web site.

To check for, and download, updates:

- 1 Log in to the IP GW blade web interface and go to **Status** > **General**.
- 2 Make a note of the software version that is currently installed.
- 3 Go to the support section of the web site and check if a more recent release is available for the IP GW blade.
- 4 If a more recent release is available, download it and save it locally.

#### To upgrade the IP GW blade:

- 1 Unzip the software release file that you downloaded.
- 2 In the IP GW blade web interface, go to **Settings** > **Upgrade**.
- 3 In the **Main software image** section, click **Browse** and locate the unzipped file.
- 4 Click **Upload software image**. The browser begins uploading the file to the IP GW blade, and a new browser window opens to indicate the progress of the upload.
  - When finished, the browser window refreshes and indicates that the software upgrade is complete and a **Shut down IP GW** button is displayed.
- 5 Click **Shut down IP GW**, confirm shut down, and restart the IP GW blade.



Note that shutting down the IP GW blade will disconnect all callers.

# Troubleshooting and technical support information

### Using the event log to help solve a problem

Unless you are experiencing a problem, all event logging sources should be set to the default, which is **Errors, warnings and information**. For more information about configuring the event log, refer to the online help accessible from the web interface.

You can use the event log to produce debugging information to assist technical support in solving your problem. However, we recommend that you only alter the setting of the event log under the guidance of technical support. In particular, you should not turn on event logging sources without good cause or advice from technical support.



Increasing logging can degrade system performance.

#### **Getting more help**

If the documentation does not answer your question or you have a problem with one of our products:

- 1 Refer to the Technical FAQ section of the web site. We keep the Technical FAQ section up to date with the latest information from our technical support team regarding the resolution of customer issues.
- 2 Contact your reseller. Our resellers have a wealth of experience with our products and this is often a quick way of solving a problem.
- If your query remains unsolved, there is a web form in the Support area of the web site that you can complete. Ensure that you provide all the details requested by the form to assist the technical support team in resolving your problem:
  - the serial number and product model number (for example:MSE 8350) of the MSE blade
  - the software build number (to find this, in the web interface, go to Status > General)
  - where you purchased the unit
  - your contact email address or telephone number